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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,170	07/02/2005	Helmut Schon		7860

7590 03/30/2007  
Max Fogiel  
44 Maple Court  
Highland Park, NJ 08904

EXAMINER
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RIDDLE, KYLE M

ART UNIT	PAPER NUMBER
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3748

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,170	<b>Applicant(s)</b> SCHON ET AL.	
	<b>Examiner</b> Kyle M. Riddle	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 18-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Morr (U.S. Patent 6,792,903).

Morr discloses a valve lift adjustment mechanism comprising:

- a housing or cover 11 and intermediate support 12 and cylinder head 13 (column 3, lines 5-7);
- a cam mounted on a camshaft 28 for rotation (column 3, lines 19-21; Figure 1a);
- an intermediate member or lifting lever 4 held displaceably and rotatably in a bearing in connecting member 5 by roll 30 activated by contact with camshaft 28 by way of a cam joint or contact surfaces of camshaft 28 and roll 31 (column 3, lines 19-21; Figure 1a);
- a power take-off member or roll drag lever 1 that transfers movement to the valve 3 and is connected to lifting lever 4 at a cam joint by contact between roll 7 on working curve 6 of the lifting lever 4 (column 3, lines 22-25; Figure 1a);

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- the shape of the working curve 6 of cam or lifting lever 4 having a point of inflection in the contact region that provides for an acceleration ramp from zero to, under full load, a maximum lift of valve 3 (column 3, lines 29-42; Figure 1a);

- the movement transferred to valve 3 being changed by modifying the position of the orientation of lifting lever 4 (column 3, lines 34-42; Figure 1a);

- the point of inflection being disposed so that a surface normal in a contact point where maximum valve lift is achieved and substantially equal to a surface normal to the contact point where highest valve acceleration occurs (Figure 1a);

- the roll 7 being in the shape of a circle (Figure 1a).

3. Claims 18-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Baguena (U.S. Patent 4,572,118).

Baguena discloses a variable valve timing mechanism comprising:

- a main driving cam 10 rotating around a fixed axis and transmitting through a cam joint or contact with rollers 12 movement to an intermediate member or cam 9 (column 3, lines 27-32; Figure 5);

- a power take-off member or lever 3 that transfers movement of cam 9 through another cam joint or contact surfaces between lever 3 and roller 8 on arced or curved surface of cam 9 to actuate valve 6 (column 3, lines 34-47; Figure 5);

- the profile of the contacting surface of cam 9 having an inflection point providing varying valve lift and duration movements from zero to maximum lift/duration (column 4, lines 5-34; Figures 2, 3, and 5);

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- modifying the movement of valve 6 is done by means of rotating control shaft 14 to rotate oscillating cam 9 to provide different surface profiles on roller 8 (column 3, lines 61-68 with column 4, lines 1-18; Figures 2, 3, and 5);

- the point of inflection being disposed so that a surface normal in a contact point where maximum valve lift is achieved and substantially equal to a surface normal to the contact point where highest valve acceleration occurs (Figure 5).

***Response to Arguments***

4. Applicant's arguments filed 18 December 2006 have been fully considered but they are not persuasive.

5. Applicant argues on the bottom of page 9 that Morr and Baguena do not disclose a "point of inflection being disposed so that a surface normal in a contact point where maximum valve lift is achieved and substantially equal to a surface normal to the contact point where highest valve acceleration occurs" regarding new independent claim 28. Examiner disagrees. As described above, the examiner believes these limitations to be included in both references in the figures cited, and therefore the rejection is maintained. New independent claim 18 is substantially the same as old independent claim 1, and new independent claim 27 is substantially the same as old independent claim 10, neither claim having the limitations argued above in independent claim 28. Applicant makes no specific arguments for any of the other claims. Applicant does cite case law on pages 10-12 but does not relate any particular case law to the claims or the rejections listed above.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Communication*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle M. Riddle whose telephone number is (571) 272-4864. The examiner can normally be reached on M-F (07:30-5:00) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kyle M. Riddle  
Examiner  
Art Unit 3748

kmr



**THOMAS DENION**  
**SUPERVISORY PATENT EXAMINER**  
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